

(U. S. Dept. Agri., Bull., 743, 1919). It has been received in bred series from Guatemala and Equador. According to Sasser the caterpillar eats galleries in the seed similiar to those of the two large weevils which infest avocado, but easily distinguished from these by the presence of the loosely packed frasse pellets. Mr. J. Birch Rorer has sent a bred series from Equador and reports that the species does a great deal of damage to avocado there. The moth lays its eggs on the surface of the nearly ripe fruit and the larva eats through the flesh into the seed. It feeds on the seed until ready to pupate, three weeks or a month and, then eats its way out through the flesh to pupate. It is almost impossible according to Mr. Rorer to buy a single avocado in the market of Equador, which has not at least one of the worms in the seed; more often there are two or three. It would be a bad pest to introduce into the United States.

The fullgrown larva is nearly an inch long. Head light brown with blackish eyespots and mandibles. Thoracic shield light brown with darker brown anterior edge; body light fuscous with small blackish brown tubercles. Spiracles on eighth abdominal segment situated high up on dorsum. Anal shield dark brown. Legs and prolegs normal, a single complete circle of alternating long and short crotches.

A NEW GENUS IN SCATOPHAGIDAE (DIPTERA).

BY CHARLES T. GREENE, *U. S. Bureau of Entomology.*

This most remarkable fly,¹ described below, was in some material which was submitted for determination by Mr. J. M. Jessup, who was the geologist of a party from the Smithsonian Institution. The party made a journey from Rampart House on the Yukon River, northward along the Alaska-Yukon Boundary to the Arctic Ocean and returned by the same route. This fly was captured on the return trip.

AMBOPOGON, n. gen.

One pair frontal bristles, below each of them is a bristle-like hair which is larger than the other hairs of the front; ocellar bristles long and directed forward; inner and outer vertical bristles near the eye (inner vertical may stand more erect than shown in drawing); post-verticals very large and directed backward. Antennae missing. Proboscis small; palpi short, slender and with a number of very short hairs and two long bristle-like hairs on the under side; no large apical bristle. One pair dorsocentrals, one prothoracic, no stigmatic bristle, one humeral, two notopleurals (the larger one in front),

¹ Described through the courtesy of Dr. J. M. Aldrich, Custodian of the Diptera, U. S. National Museum.

one presutural, one supraalar, one postalar; no mesopleural, or pteropleural bristles, one sternopleural, a row of bristles on the sternopleura near the middle coxa; hind coxa with one large bristle on the outside. Scutellum with two large, marginal pairs of bristles. Wing normal, sixth vein to the wing margin; two small, basal cells.

Type *Ambopogon hyperboreus*, n. sp.

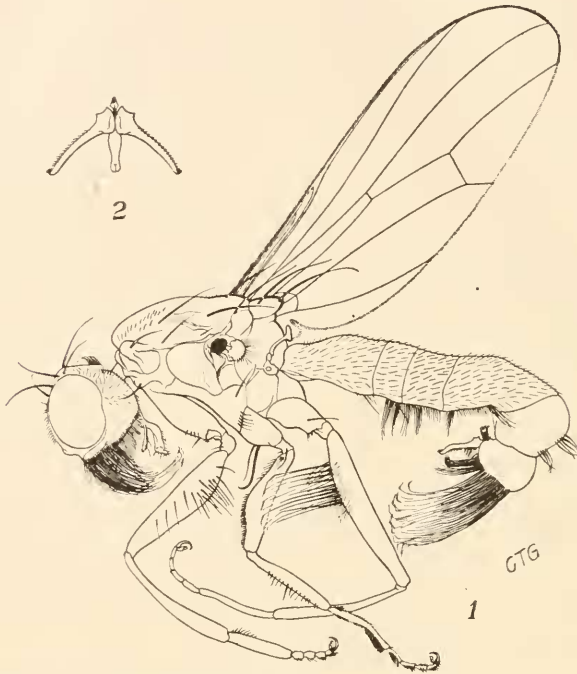
Cochliarium (Becker, Dipterologische Studien I, Berliner Entomol. Ztg. Bd. XXXIX, 1894, p. 183, Heft 1) is the nearest relative, although quite remote and very distinct.

A. hyperboreus, n. sp.—*Male* (Fig. 1).—Brownish black, legs mostly yellow.

From in front the head is slightly wider than high. Face very small and pale yellow, darker on the sides; antennae missing, antennal pits located about the lower fifth of the eye; front narrowing towards the antennae, yellow, a brownish area across the lunule, a broad V-shape depression in the middle with the upper ends more golden; vertex, ocellar triangle and upper part of the face along the orbits dark brown and shining; numerous dark, bristly hairs on apical half of front; eyes cover nearly half the side of the head; occiput well developed, nearly as wide as the horizontal diameter of the eye, upper half of occiput black with numerous black hairs which extend down on the yellow of the lower half; a group of closely set brownish, bristly hairs on the occiput close to the junction of the neck; lower edge of head nearly straight, a broad ridge starting at the front and extending half way along the lower edge of the head. On this ridge are the whiskers, which are extremely long, curved backward, blackish bristles, very pale toward the apex, back of these bristles the beard is more like bristly hairs; on the front end of this ridge are located several bristles which are directed slightly forward; no distinct oral vibrissae in the male; back of this heavy beard, along the oral opening, are very numerous whitish hairs which are curly or crinkly at the apex. These bristly hairs are more numerous towards the front.

Thorax shiny and nearly black with numerous short black hairs; on the dorsum is a broad stripe from the apex to the scutellum and a narrow area above the pleural suture, from humeral callus to the wing, white, pruinose; scutellum very faintly white pruinose; halteres white, brownish at base. Abdomen nearly black with numerous black hairs; first segment quite long, sides parallel, second and third segments much shorter than the first, but both widen considerably toward their apices; fourth segment nearly twice the length of the third and narrowing slightly at the apex; next segment globular, chitinous, and with a tuft of bristly hairs in the middle and at the apex; last segment globular with a heavy brush of large, dark brown bristles which are yellowish and crinkly at the apex. These bristles are about three times the length of the segment. Forceps reddish brown, points widely separated. Venter has numerous, long, yellowish hairs on second and third segments. Near the apical corner of the first and second segments, on the

ventral side, is a long, black bristle. Front coxa quite long and yellow; middle and hind coxae more normal and brownish, darker at the base. Legs yellow except front femora, apical half front tibiae, front tarsi, apical half hind femora, apical fourth of hind tibiae, and last two joints of hind tarsi, blackish brown.



Ambopogon hyperboreus GREENE.—Fig. 1, male; Fig. 2, forceps from above.

Front femora with numerous long, black bristles on the outside, more closely set towards the base; front metatarsus straight, cylindrical and slightly longer than the four following joints; middle coxae each have a long, black, hook-like spine on the inside and a long black bristle in front of it; middle femora shorter than the first and much swollen on front side near the middle with numerous, short, spine-like bristles on this swollen part; middle tibiae with a row of heavy black spines on the upper side, spines longer near the middle; middle metatarsus noticeably bent, with numerous short black spines on under side, larger at base and on the upper side with a row, the entire length, of black hairs, longer, curved and much closer set towards the

apex; hind femora long with a row of very long, brownish yellow, stout bristles, which are very pale yellow towards apex and the tips bent. This row is located close to the under side of the femur and behind this row are numerous yellow shorter bristles. Hind metatarsus long, slender and only slightly bent.

Length 4.75 mm.

Type Locality.—Lat. 69-10 N, Long. 141 W.

One specimen. Aug. 14-17, 1912. J. M. Jessup, Collector.

Type, male, Cat. No. 22322, United States National Museum.

THE GENITALIA AND TERMINAL ABDOMINAL STRUCTURES OF MALES, AND THE TERMINAL ABDOMINAL STRUCTURES OF THE LARVAE OF "CHALASTOGASTROUS" HYMENOPTERA.

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In a paper published in vol. 27, 1916, p. 303, of the Ent. News, the insects here discussed were classed as a distinct order called the *Prohymenoptera*, or sawfly group—a more inclusive division than MacLeay's "Bombyptera," which, according to Ashmead, 1896, included only the "Uroceridae" (*i. e.*, the Siricidae), the "tenthredinid" sawflies being placed with the Trichoptera, by MacLeay, who restricted the designation "Hymenoptera" to the forms with apodous larvae. Rohwer and Cushman, 1917, would divide the sawfly group into two suborders, the Chalastogastra (Konow, 1897) and the Idiogastra (Oryssidae), but these investigators are unwilling to admit the sawfly group as a distinct order, because they consider that the Idiogastra (*i. e.*, the Oryssidae) are intermediate between the rest of the sawfly group and the higher Hymenoptera called Clistogastra¹ by Konow, 1897. If the existence of intermediate forms, however, were sufficient grounds for "lumping" two related orders into one "homogeneous" order, on exactly the same grounds, we would have to group the Lepidoptera and Trichoptera together as merely one order, since the lepidopterous family Micropterygidae is unquestionably intermediate between the Lepidoptera and the Trichoptera, and has even been removed from the Lepidoptera and placed as a suborder of the Trichoptera by Comstock, 1918, in his recent book on the wing veins of insects! The non-participation of the first abdominal seg-

¹ The division of the Hymenoptera into Symphyta and Apocrita by Gerstaecker, 1867, is exactly the same as Konow's division of the Hymenoptera into Chalastogastra and Clistogastra, which it antedates by thirty years.